



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5  
77 WEST JACKSON BOULEVARD  
CHICAGO, IL 60604-3590

SEP 20 2018

REPLY TO THE ATTENTION OF  
WC-15J

CERTIFIED MAIL 7016 3560 0000 4829 8924  
RETURN RECEIPT REQUESTED

Central Sands Dairy, LLC  
Attention: Ex. 6 Personal Privacy (PP)  
15918 County Road G  
Nekoosa, Wisconsin 54457

Subject: June 21-22, 2017 Compliance Evaluation Inspection

Dear Mr. Ex. 6 Personal Privacy (PP)

Enclosed, please find a copy of the U.S. Environmental Protection Agency Inspection Report for the Concentrated Animal Feeding Operation inspection conducted at Central Sands Dairy, LLC on June 21-22, 2017. The purpose of the inspection was to evaluate and document compliance with the Clean Water Act and Central Sands Dairy, LLC's Wisconsin Pollutant Discharge Elimination System permit WI-006353302.

If you have any questions, please contact Cheryl Burdett of my staff at (312) 886-1463.

Sincerely,

A handwritten signature in black ink, appearing to read "Ryan Bahr".

Ryan Bahr, Chief, Section 2  
Water Enforcement and Compliance Assurance Branch

Enclosures

cc: Bruce Rheineck, WDNR  
Aaron O'Rourke, WDNR  
Andy Morton, WDNR  
Laura Chern, WDNR  
MaryAnn Lowndes, WDNR

**CWA COMPLIANCE EVALUATION INSPECTION REPORT  
U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION 5**

**Purpose:**

Compliance Evaluation Inspection

**Facility:**

Central Sands Dairy, LLC  
15918 County Road G  
Nekoosa, Wisconsin 54457  
Juneau County  
44.22N, -89.97W

**NPDES Permit Number:**

WI-0063533-02-0

**Date of Inspection:**

June 21-22, 2017

**EPA Representatives:**

Cheryl Burdett	312-886-1463
<a href="mailto:burdett.cheryl@epa.gov">burdett.cheryl@epa.gov</a>	
Joan Rogers	312-886-2785
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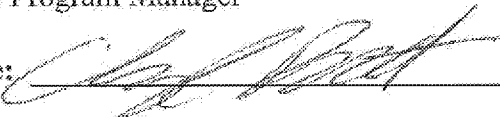
**State Representatives:**

Michelle Scarpace	608-275-3281
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Laura Chern	608-266-0126
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**Facility Representatives:**

Adam Onan – Dairy Manager	715-340-2052
<a href="mailto:aonan@live.com">aonan@live.com</a>	
Jeff Sommers, Central Sands Dairy	715-498-1063
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Cameron Field, Attorney	602-283-2259
<a href="mailto:cfield@michaelbest.com">cfield@michaelbest.com</a>	

Report Prepared by:  
Cheryl Burdett, CAFO Program Manager

Inspector's Signature: 

Approver Title: Ryan Bahr, Section 2 Chief, Water Enforcement and Compliance Assurance Branch

Approval Signature: 

Approval Date: 9/20/18

1. LIST OF ATTACHMENTS:

ATTACHMENT A: PHOTO LOG

ATTACHMENT B: SITE LAYOUT AND PROPOSED TOPOGRAPHY  
FACILITY DEVELOPMENT PLAN

ATTACHMENT C: PERMIT COMPLIANCE SCHEDULE

ATTACHMENT D: ADDITIONAL AREAS OF CONCERN

Table 1:	2017 Application Rates
Table 1A:	2017 Additional Land Application Concerns
Table 2:	2016 Nitrogen Application Rates
Table 3:	2015 Nitrogen Application Rates
Table 4:	2013-2016 Four Year Average Uptake Rates of Phosphorus
Table 5:	2017 Insufficient Number of Soil Samples Taken based on Acreage

ATTACHMENT E: DOCUMENTS SCANNED, PHOTOGRAPHED,  
PROVIDED TO EPA BY CENTRAL SANDS  
DAIRY, LLC, OR WDNR'S E-PERMITTING WEBSITE



## 2. BACKGROUND

The purpose of this report is to describe, evaluate, and document Central Sands Dairy, LLC's (CSD) compliance with the Clean Water Act (CWA) and its WPDES Permit WI-0063533-02-0 at its Nekoosa, Wisconsin facility. The inspection and review were performed pursuant to Section 308(a) of the Federal Water Pollution Control Act, as amended.

CSD is a large concentrated animal feeding operation (CAFO) based on the number of animals confined at the facility for 45 days or more during a twelve-month period.

## 3. SITE INSPECTION

EPA introduced ourselves at around 9:00 AM, presenting our credentials. EPA then proceeded to go through the Region 5, CAFO Checklist. Tables 2 through 7 reflect information provided by CSD personnel before the walk-through of the facility, unless otherwise noted.

**Table 1: Site Entry**

<b>Arrival Time:</b>	9:00 AM
<b>Temperature:</b>	68° Fahrenheit
<b>Precipitation:</b>	None
<b>Presented credentials?</b>	Yes, at approximately 9:00 AM
<b>Credentials presented to whom and at what time?</b>	Jeff Sommers and Adam Onan
<b>EPA vehicle parked in approved location?</b>	Yes
<b>Location where EPA vehicle was parked?</b>	Next to the office
<b>Disposable boots worn?</b>	Yes
<b>Other bio-security measures taken:</b>	Yes. EPA had not been on any other Animal Feeding Operations that week. EPA did not enter barns where animals were present.

**Table 2: Checklist**

<b>Checklist(s) Used</b>	
R5 CAFO Inspection Checklist	
Federal CAFO Nutrient Management Plan Checklist	
Inspection Report as a Checklist	
<b>Facility Documents Reviewed:</b>	
Documents reviewed after the inspection are listed in Attachment E.	
<b>If photographs or documents were taken, does the facility consider any to be Confidential Business Information (CBI)?</b>	No
<b>Which information does the facility consider to be CBI?</b>	None

**Table 3: Facility Description**

Type of Animal	Number of Animals	Capacity	Type of Confinement
Dairy	3510 milking – 4200 total milking and dry. No calves or heifers	4200-4400	All in Barns
<b>Minimum Number of Animals in previous 5 years:</b>			Always between 4200-4400
<b>Maximum Number of Animals in previous 5 years:</b>			Always between 4200-4400
<b>Number of Animals that are stabled/confined and/or fed/maintained for 45 days or more in previous 12 months:</b>			4200-4400
<b>Amount of Liquid Manure Generated per year:</b>			Total 60 million gallons
<b>Amount of Solid Manure Generated per year:</b>			20,000 tons – fiber portion after digester
<b>Does the facility have an NPDES Permit?</b>			Yes – Permit Term Effective January 1, 2012. WDNR did a permit modification issued on July 7, 2016. CSD appealed a portion of the modified permit WPDES permit WI-0063533-02-0. According to CSD, they are required to follow the modified permit, but not the portion of the modified permit that was appealed. The modified WPDES Permit WI-0063533-02 expired on 12/31/2016. The new permit

	had not been issued at the time of the inspection.
<b>SIC or NAICS code:</b>	0241
<b>CAFO Defined Reason</b>	Size
<b>Do animals have direct access to WOUS?</b>	No
<b>Are crops, vegetation, forage growth, or post-harvest residues sustained in the normal growing season over any portion of the lot or facility where animals are kept?</b>	No
<b>What is the area (acres) of the production area?</b>	80 acres
<b>What is the area (acres) of the pasture?</b>	None
<b>How many employees (not counting family members)?</b>	32
<b>Other facilities under common ownership (name and address):</b> None	

**Table 4: Livestock Waste Storage**

<b>Type of Storage</b>	<b>Storage Capacity</b>	<b>Type of Liner</b>	<b>Depth Markers Present</b>	<b>Last Time Waste was Removed</b>	<b>Amount of Waste Removed</b>	<b>Days of Storage</b>
Manure storage lagoon	22 million gallons	Concrete	On south bank of manure storage lagoon	< 1month ago	CSD personnel asked that we look in the daily logs	180 days
Solid Stacking					10+ K tons	
<b>Records at site of storage structure design?</b>				Yes		
<b>Is manure stored for the short term? If yes, describe where it is stored, how it is drained and where it drains to.</b>				<p>CSD stores solids from December through April on a stacking pad. According to CSD, the solids can be spread as necessary according to CSD's WPDES Permit.</p> <p>The process wastewater flows off the pad where the solids are stored to a pit that pumps to the digester. The pump is designed to collect the 1<sup>st</sup> 4 inches during a rain event. The remaining process wastewater flows into an engineered grass depression. The depression does not have an overflow; it infiltrates into the ground.</p>		
<b>Are records kept of the level of manure in the storage structures?</b>				Yes		

When was the last time a storage structure was emptied, either partially or completely?	< 1 month prior to June 21, 2017
What amount of manure or process wastewater was removed the last time the storage structure was emptied, either partially or completely?	According to Jeff Sommers and Adam Onan, it varies and is ongoing and they suggested that we check the records to find out how much was emptied from the structures.
Do the facility personnel inspect and keep records of all diversion devices?	No
Do the facility personnel inspect and keep records of all impoundments?	Yes
Do the facility personnel inspect and keep records of all the water lines?	Yes
Do the facility personnel perform routine visual inspections and keep records of the production area?	Yes, conduct daily visual checks.
Does the waste storage system have a managed outfall or discharge point? If yes, provide a description of the outfall and a description of the area receiving the discharge.	No
Has the facility had any documented discharges of livestock waste to surface water in the past year?	No
Are there safety devices installed around any manure storage ponds? (Barriers at the end of manure push off platforms, fences around pond, signage.)	No

**Table 5: Livestock Waste Management**

<b>Describe the way manure is collected and disposed of at the facility:</b>
<p>Solid manure is stacked on a pad that drains into a manhole that is piped to the digester.</p> <p>Freestall Barns are highest in the middle and have a 0.75% grade down toward each side. The Freestall Barns are flushed with process wastewater from the manure storage lagoon and the process wastewater is collected in the flush pit, which is then pumped to the digester. The solids are put through the digester and the liquid is then pumped to the manure storage lagoon.</p> <p>All process wastewater and manure in the manure storage lagoon is injected. Central Sands used to irrigate its process wastewater, but due to nitrate levels; CSD stated that they have not irrigated in the last three years. However, the permit allows for irrigation of manure and process wastewater.</p>
<b>Describe the way used bedding is collected and disposed of at the facility:</b>

CSD uses the McLanahan system to separate manure and used bedding, so that the sand can be reused as bedding.	
<b>Are mortality records kept?</b>	Yes
<b>Describe the way mortalities are managed at the facility:</b>	
Mortality shed on the southwest corner of the production area. According to CSD, when they call the rendering company, the rendering company will come out either the same day or the next business day.	
<b>What type of method is used to provide drinking water for the animals?</b>	Float type drinkers – 5 per pen.
<b>Describe the way spilled drinking water is collected and disposed of at the facility:</b>	
The spilled drinking water is collected with manure and urine and flows via gravity to its manure storage lagoon.	
<b>Describe the way mist cooling water is collected and disposed of at the facility:</b>	
The mist cooling water is used in all the barns, except the dry cow barn. It is collected in the flush pit which is then pumped to the digester. The liquid is then pumped to the manure storage lagoon.	
<b>Describe how chemicals are stored and how used or spilled chemicals are collected and disposed of at the facility:</b>	
CIP and teat dip are stored in a separate room in the milking parlor building. The chemicals in the room include: 55-gallon drums – 6 for CIP, 6 for teat dip. Drains in the chemical room drain to the flush pit then to the manure storage lagoon.	
<b>Describe the way water has been used to wash/flush barns and where the process wastewater is collected and disposed of at the facility:</b>	
The holding pen is flushed with process wastewater from the manure storage lagoon. The milking parlor uses clean water to rinse the parlor. The process wastewater from both areas go into the flush pit then to the digester. The liquid from the digester goes to the manure storage lagoon.	
<b>Describe where water comes from that is used to clean and/or flush:</b>	
CSD uses a hose to wash down the milking parlor with clean well water.	
<b>Describe the way feed is contained and how runoff from feed is collected and disposed of at the facility:</b>	
The pit at the southeast corner was first designed to collect the first ¼ inch. However, it was reconstructed to have less of a steep pitch and catches most of the wastewater which is pumped directly to the manure storage lagoon. Any wastewater that does not flow into the pump flows to the engineered grass infiltration depression which has no outlet.	
<b>If a dairy, describe how process wastewater from the plate cooler water is collected and disposed of at the facility:</b>	
Plate cooler water goes to the flush pit and then to the digester. All liquid from the digester goes to the manure storage lagoon.	
<b>If a dairy, describe how process wastewater from the cleaning of the milking parlor is collected and disposed of at the facility:</b>	

Wastewater from the cleaning of the milking parlor goes to the flush pit then to the digester and all liquid from the digester goes to the manure storage lagoon.	
<b>If a dairy, describe how process wastewater from the cleaning of the milk tanks is disposed of at the facility:</b>	
Wastewater from the cleaning of the milking parlor goes to the flush pit then to the digester and all the liquid from the digester goes to the manure storage lagoon.	
<b>If a dairy, how many times per day are cows milked?</b>	Three times per day

**Table 6: Land Application and Disposal of Manure and Process Wastewater**

<b>Does the facility perform and keep records of the manure testing?</b>	Yes
<b>When was the last time a sample was taken of the manure and/or process wastewater?</b>	Test regularly
<b>Describe the process to take the manure and/or process wastewater sample.</b>	From manure storage lagoon with long stick when pumping
<b>Number of acres available for land application:</b>	7200 acres
<b>Are land application records kept?</b>	Yes
<b>Who applies the manure and process wastewater to the fields?</b>	AJ Bussan – keeps records. Ken Kranig – Lucas Wysocki do the land applications
<b>Are weather conditions at time of application kept? (24 before – 24 after)</b>	No, this information is not kept.
<b>Does the facility perform and keep records of the soil testing?</b>	Yes, annually as required by the NMP.
<b>Is manure transferred off-site to another party?</b>	No
<b>Are manure transfer records maintained?</b>	NA
<b>Do facility personnel perform periodic inspection of land application equipment?</b>	Yes – Lucas Wysocki is the person who conducts the land application equipment inspections.

**Table 7: Receiving Surface Waters**

<b>Describe the surface flow pathways:</b>	
No surface flow was observed leaving the production area.	
<b>How many months out of the year is there flow in the nearest surface water pathway:</b>	Petenwell Lake has water in it year-round.
<b>Are there any storm water pathways entering the facility?</b>	No
<b>Are there any clean water ponds on site?</b>	Yes, there are two clean water ponds on site.
<b>What is the name of the first waterway that is identified as a Traditional</b>	Wisconsin River

<b>Navigable Water (TNW) for surface flow from the facility?</b>	
<b>Is the surface water pathway nearest to the facility considered to be ephemeral, intermittent or perennial?</b>	Perennial
<b>Is the surface water nearest to the facility considered to be impaired?</b>	Yes, for total phosphorus

EPA sent an e-mail prior to the inspection requesting documents that would assist EPA in answering questions for the review of permit compliance and the Nutrient Management Plan. Attachment E contains the Documents received during the inspection.

Tables 8 through 11 reflect information provided by CSD personnel and based on EPAs review of records.

**Table 8: WPDES Permit and Nutrient Management Plan**

<b>NMP on site?</b>	Yes
<b>Date NMP Submitted:</b>	2012
<b>Planner Name/Company:</b>	Todd Schaumburg
<b>Date that the NMP was last updated:</b>	3/31/2017
<b>Storage Description:</b>	In the plan specs from 2006, there is a description of the as-built of the Digester built in 2007. No additional storage designs were on site. CSD personnel stated that WDNr would have a copy.
<b>Amount of Manure Generated:</b>	In 2017, the expected amount of manure and process wastewater produced on annual basis was 37,500,200 gallons and 14,472 tons. Expect to apply 58,637,000 gallons and 22,055 tons.
<b>Capacity of Storage:</b>	22-million-gallon manure storage lagoon
<b>Duration of Storage:</b>	Six months
<b>Amount of Spreadable Land:</b>	Approximately 7200 acres
<b>Mortality Management Plan:</b>	Invoices from renderer
<b>Clean Water Diversion System:</b>	Yes, roof water goes to vegetated areas between the barns and infiltrates into the ground.
<b>Direct Contact Prevention Plan:</b>	Yes, mature milking and dry cows are kept in barns.
<b>Chemical Management Plan:</b>	Room where chemicals are kept has a drain that discharges to the manure storage lagoon.
<b>Conservation Practices:</b>	Listed in the NMP
<b>Manure Testing Protocols:</b>	Protocols are in the Permit
<b>Soil Testing Protocols:</b>	Protocols are in the Permit
<b>Land Application Protocols:</b>	Permit and NMP. NMP for 2017 reads that spreading will occur in spring before planting, both liquid and solid manure. Summer applications will be made only to fields that receive a fall cover

	crop, surface applied on cover crop using airway bar, or applied with a nitrification inhibitor. Summer applications with center pivot irrigation to growing crops, will be utilized to reduce the potential for nutrient leaching. There will be a planned winter application of liquid manure. Solid manure may be applied in winter. The prohibition period of February and March will be followed if the ground is snow covered and/or frozen.
<b>Additional NMP comments:</b>	EPA was told that applications using irrigation were not being done, but is still written in the NMP. February and March application of manure is prohibited according to NR 243.
<b>Does the NMP reflect the current operational characteristics?</b>	No. The 2017 NMP Narrative mentions that irrigation is a method of land application. According to the Central Sands Personnel, they have not irrigated in three years.
<b>Are the number of acres owned/leased consistent with what is listed in the NMP?</b>	The listed fields total 7413.5 acres. The NMP lists 7460.0 acres.

**Table 9: Land Application Records (details of the records reviewed)**

Note that EPA requested written documentation of land application records. Jeff Sommers stated that the information is initially hand-written and then transferred from hand-written to a spreadsheet. Mr. Cameron Fields, CSD Legal Counsel, said that the facility did not have the hand written documentation of land application records.

<b>Fields available for application 2017:</b>	Snap Plus Spreading Plan Report identifies fields for application in 2017.
<b>Timing limitation on fields:</b>	The NMP narrative includes some of the restrictions of application based on season and method of application. The SnapPlus Spreading Plan Report identifies amount of manure and type of manure to be applied by season.
<b>Annual manure analysis for N and P</b>	Yes
<b>Soil tests for fields (for P) less than 5 years old?</b>	Yes
<b>Inspection of land application equipment documentation:</b>	It is broadly written in the Nutrient Management Plan.
<b>Crop:</b>	Several different documents in Snap Plus
<b>Application Rate:</b>	Calculated in Snap Plus
<b>Crop Yield Goals:</b>	Planned yields are used in Snap Plus
<b>Timing of land application:</b>	The planned season for land application is in documents generated by Snap Plus
<b>Method of land application:</b>	Documents are generated in SnapPlus.



<b>Additional land application information:</b>	In the NMP there is a “NMP Adaptive Nitrogen Management” 2016.pdf, but a letter from CSD attorney stated that the adaptive nitrogen management plan would not be followed.
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**Table 10: Facility Records (details of the records reviewed)**

<b>Diversion devices:</b>	Infiltration ponds
<b>Impoundments:</b>	Manure storage lagoon and two storm water ponds are listed in the site plans and aerial photographs.
<b>Depth marker observations:</b>	Yes
<b>Water Lines:</b>	Yes
<b>Mortality handling:</b>	Yes
<b>Storage Structure Design:</b>	Yes
<b>Overflow records:</b>	None recorded
<b>Crop Yields:</b>	No – Only planned yields were available for review.
<b>Land Application Dates:</b>	The following SnapPlus records include dates for land application: Daily log reports, Annual Spreading Reports and sometimes dates of land application are included in the Snap Plus Spreading and Nutrient Management Sorted by Crop Report.
<b>Weather Conditions at time of application (24 before-24 after):</b>	None recorded.
<b>Test Methods for Manure Testing:</b>	The laboratory report for the manure analysis does not include the method of analysis.
<b>Test Methods for Soil Testing:</b>	The Snap Plus reports for the soil tests do not include the method used for analyzing the soil tests.
<b>Manure Test Results:</b>	Yes, results were provided in the NMP for 2016, but not for 2017. According to NR 243, manure samples are to be analyzed for the month that manure is applied to the fields.
<b>Soil Test Results:</b>	Yes, results are provided, but not all fields that received manure had annual soil test results.
<b>Calculations of N and P applied:</b>	Calculations are done in Snap Plus
<b>Application Methods:</b>	NMP identifies methods of application.
<b>Application Equipment Inspection Dates:</b>	This has been recorded, but the form does not specifically identify what equipment is being inspected.

**Table 11: NPDES Permit**

<b>Type of permit</b>	Individual
<b>Is a copy of the permit on site?</b>	Yes
<b>Date that the permit was issued:</b>	Amended permit was issued July 7, 2016.
<b>Date that the permit will expire:</b>	Permit expired on December 31, 2016. Wisconsin DNR has not re-issued the permit, which is still under review.
<b>Permitted number of animal units:</b>	Permitted as a large CAFO. The NMP identifies that the number of animals = 4535 (milking =3575+ dry =550+ Heifer = 350+ calves =60)
<b>Does the permit contain a compliance schedule? If yes, provide a detailed description of the requirements and the status.</b>	Yes, Attachment C contains the permit compliance schedule. EPA did not conduct a full review of the compliance schedule requirements.
<b>Have there been any changes made to the production area since the permit was issued? If yes, provide a detailed description.</b>	No
<b>Are there any practices in the permit that are not being done at the facility? (Records kept, inspections performed, etc.)</b>	Yes, Areas of Concern were discussed with CSD in the closing conference. Attachment D lists the Areas of Concern from the NMP file review.

#### **4.0 WALK-THROUGH OF THE FACILITY**

Cheryl Burdett, Joan Rogers, Carla Valdes, and Andi Hodaj met with Wisconsin Department of Natural Resources (WDNR) at a gas station in Nekoosa, Wisconsin at 8:30 AM. After coordinating with WDNR, EPA and WDNR drove to Central Sands Dairy, LLC and arrived at 9:00 AM.

At the facility's office, the inspection team was greeted by CSD's Attorney, CSD's Dairy Manager, and CSD's Farm Manager.

EPA began the inspection by asking which permit was effective and then going through the checklist. CSD's attorney said that they were following the July 7, 2016 modified permit, except for the provision in the permit that was being appealed by CSD.

Using an aerial photograph, EPA asked CSD representatives to identify all the buildings in the aerial photograph (Attachment A).

Clean water around the barns is directed through topography from the barns towards the grassed water areas in front of the barns and water does not leave the grassed areas. (Attachment B, Photo Log)

CSD's Farm Manager stated that they have not had any overflows from the manure storage lagoon and that they would never allow it to overflow. There is also a grassed

depression area next to the manure storage lagoon that captures overflows that may result from a significant rain event.

Manure has only been applied via injection in the past three years, according to CSD's Jeff Sommer.

EPA finished the checklist and items at 9:57 AM. EPA donned their biosecurity boots and started the walk-through of the facility at 10:10 AM heading east and then north toward the manure storage lagoon (P6210155 through P6210159) where they observed the gauge for the Maximum Operating Level (MOL) of the manure storage lagoon. EPA continued towards two of the wells, CSD-1S and CSD-1D (P6210161 through P6210164). EPA walked back north toward the bagged silage stored north of the manure storage lagoon. EPA observed the bagged silage on the south side of the production area. EPA noted in the photo log that CSD-6 is approximately 100 feet from northeast corner of the manure storage lagoon (P6210171). EPA continued to the north and walked around the bagged silage area and the digester (P6210169, P6210170, P6210172 through P6210175). Sand storage was located to the north of the silage bunker and west of the bagged silage (P6210176 and P6210178). EPA observed monitoring well CSD-7 at the northwest corner of the lagoon (P6210180). The concrete pad that stored biosolids and feed was graded to slant toward the manhole to collect leachate (P6210181 and P6210182). EPA observed the location of monitoring well CSD-8 located at the northwest corner of the digester. EPA looked inside the sand separator building and CSD explained the sand separation process as EPA observed (P6210187 through P6210190). EPA walked toward monitoring well CSD-4 located north of the north barn. EPA observed monitoring wells CSD-4 (P6210195) and CSD-3D located in the northwest corner of the north barn. EPA continued to the south where process water is collected from the holding area and south barn and milking parlor.

As EPA was walking around Stormwater Pond 1 and Stormwater Pond 2, EPA did not observe process wastewater from the barns or silage pads entering the stormwater ponds. EPA was told by CSD that water within the stormwater ponds infiltrates into the ground (P6210212 through P6210220). EPA walked through the silage bunkers located east of Stormwater Pond 2 and west of manure storage lagoon. The silage bunker is bermed and the pit that collects the leachate had some feed on top of the pit and leachate from the silage was on the outside of the pit (P6210221 through P6210224). However, any process wastewater from the silage bunker that did not make it into the pit flowed into the engineered grass depression where it was designed to infiltrate into the ground. The walk-through of the production area ended at monitoring well CSD-5. EPA then walked back to the office at approximately 12:00 PM.

#### **4.1 Closing Conference**

The EPA and WDNR Inspection Teams went for lunch and returned to the facility at 1:20 PM. EPA entered the office at 1:30 PM for a closing conference with CSD and the WDNR Inspection Team. EPA requested the design plans of the manure storage lagoon and CSD said that they do not have it on-site, but that WDNR would have it. EPA also requested a clean water diversion schematic, but CSD did not have one on-site. The

closing conference concluded at 2:30. At this point, WDNR left and EPA started scanning documents to review CSD's Nutrient Management Plan for review to be completed in EPA's office later.

**Table 12: Areas of Concern discussed with CSD during Closing Conference**

Were specific "Areas of Concern" discussed with facility personnel?	Yes
Who were the Areas of Concern discussed with? CSD Personnel	
<p><b>AREAS OF CONCERN DISCUSSED:</b></p> <ol style="list-style-type: none"> <li>According to SnapPlus Soil Tests Records : Some fields had only 1 sample recorded. NR 243 requires one sample for every 5 acres. Recorded number of samples for the following fields were not done according to the recommended number: <ol style="list-style-type: none"> <li>4/20/2016 at Field CF01 – required number of samples 27. Actual number of samples taken was 1.</li> <li>4/20/2016 at Field CF02 – required number of samples 15. Actual number of samples taken was 1.</li> </ol> </li> <li>Annual Soil sampling required by CSD's Permit: <ol style="list-style-type: none"> <li>N02 – no soil tests were taken for 2016</li> <li>N05 – no soil tests were taken in 2015 and 2016</li> <li>N10 – no soil tests were taken in 2015 and 2016</li> <li>N15 – no soil tests were taken in 2015 and 2016</li> <li>N23 – no soil tests were taken in 2015 and 2016</li> <li>N24 - no soil tests wee taken in 2015 and 2016</li> <li>N41 - no soil tests were taken in 2015 and 2016</li> <li>Basse South – 3/17/2016 - no soil test, no lab number</li> <li>N33 – no soil tests for 2014 and 2015</li> <li>N46 – No soil tests for 2014, 2015 and 2016</li> </ol> </li> <li>The soil tests collected on 10/27/2014 and 10/27/2015 were for soil test results for years 2015 and 2016. The information recorded for these dates included the exact same lab numbers and lab results. The soil samples are required to be collected and analyzed annually for CSD fields. Without the correct data entered for Soil Test P, EPA could not determine in 2015 if soil tests reached 200 ppm or if CSD has applied phosphorus at a rate that will not exceed the phphosphorus 50% uptake rate for 4 years for fields that have soil tests over 100 ppm. The following fields are missing the soil test information for one of the two years: CASINO N, CASINO S, ELSEN, ELSEN North, N01-N 14; N18-22; N25-27; N29-63; RDO 01E, RDO 01W, RDO 02N, RDO 03, RDO 04N, RDO 06E, RDO 06W, RDO 07E, RDO 08, RDO 09E, RDO 09W, RDO 10, RDO 11N, RDO 11S, RDO 12N, RDO 13E, RDO 13W, RDO 14, RDO 15, RDO 16, RDO 17E, RDO 17W, RDO 18N, RDO 18S, RDO 19E, RDO 19W, RDO 19S, RDO 20, RDO 21N, RDO 21S, RDO 22</li> <li>Actual lab data was not provided for soil tests and manure tests. CSD stated that EPA must request this data from the Lab.</li> <li>EPA reviewed documents in SnapPlus to assess CSD's NMP for compliance. EPA noted during the NMP review of the SnapPlus documents that SnapPlus is using the total acres for land application of the field and not the actual acres that</li> </ol>	

were applied to. This could potentially lead to over-application because the acreage is less than what is actually being reported.	
<b>Exit Time:</b>	EPA completed the production area inspection at 2:30 PM and began scanning and photographing documents until approximately 5:30 PM on 6/21/2017. EPA returned to scan and photograph documents on 6/22/2017. EPA completed the file collection at approximately 10:30 AM on 6/22/2017.
<b>Disposable Boots Left at Facility?</b>	Yes

**Table 13: Waterway Documentation**

<b>List the pathway taken by EPA inspectors to document the waterway at the facility.</b>
EPA did not walk waterways because we did not observe runoff leaving the production area.

**Table 14: Sampling Information**

<b>Were samples taken?</b>	No
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#### **4.2 NMP File Collection:**

EPA requested that CSD provide their Nutrient Management Plans to EPA at the time of the inspection. CSD provided EPA with hard copies of their Nutrient Management Plans, which EPA had to scan and photograph in order to be able to review back at EPA's office. As EPA was scanning and photographing NMPs, EPA noted that weather records for 24 hours prior to land application and 24 hours after land application were not within the documents. EPA asked if weather was recorded. CSD's Farm Manager stated that they subscribed to the Great Lakes Weather Service with the closest raing gauge being in Wassau, Wisconsin. CSD, at the time of inspection, did not produce weather records for 24 hours prior to land application and 24 hours after land application.

#### **4.3 NMP Post-Inspection Finding:**

EPA reviewed the documents provided by CSD during the June 21 through June 22, 2017 inspection and documents downloaded from the WDNR's e-permitting website. EPA's review of the documents identified approximately 205 instances of land application practices or reporting issues between 2015 and 2017 that were inconsistent with CSD's WPDES Permit and NMP. These findings are found in Attachment D Table 1 through Table 5.

# **ATTACHMENT A**

## **PHOTO LOG**

**June 21, 2017**

Central Sands Dairy LLC

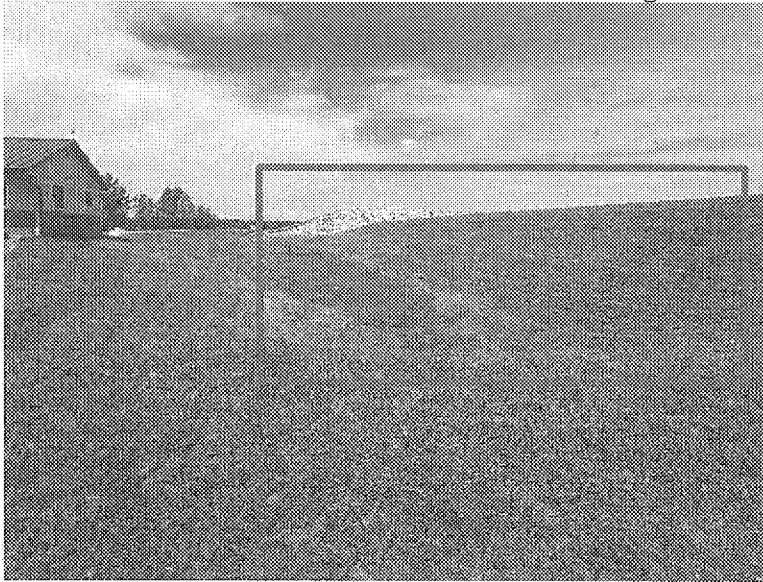
EPA Inspection 6/21/2017

All photos taken by Cheryl Burdett, CAFO Program Manager, EPA

Walk-through with photos started at 10:10 AM – 1:20 PM

Photo Log done by Andi Hodaj, EPA

Camera: Olympus Tough F2.0 (time was not listed below because the camera was not recording correct time)



1: P6210154

Description: Within the blue box is the vegetated depression area on the south side of the manure storage lagoon that served as a collection area in case of overflows from the manure storage lagoon. There was a hole of about 1ft diameter in the middle of the vegetated depression.

Location: South side of the manure storage lagoon

Camera Direction: West

Date: 6/21/2017



2: P6210155

Description: Manure storage lagoon.

Location: Southeast corner of the manure storage lagoon

Camera Direction: West

Date: 6/21/2017



3: P6210156

Description: Arrow depicts the pumping unit, on the east bank of the manure storage lagoon.

Location: Southeast corner of the manure storage lagoon

Camera Direction: North

Date: 6/21/2017



4: P6210157

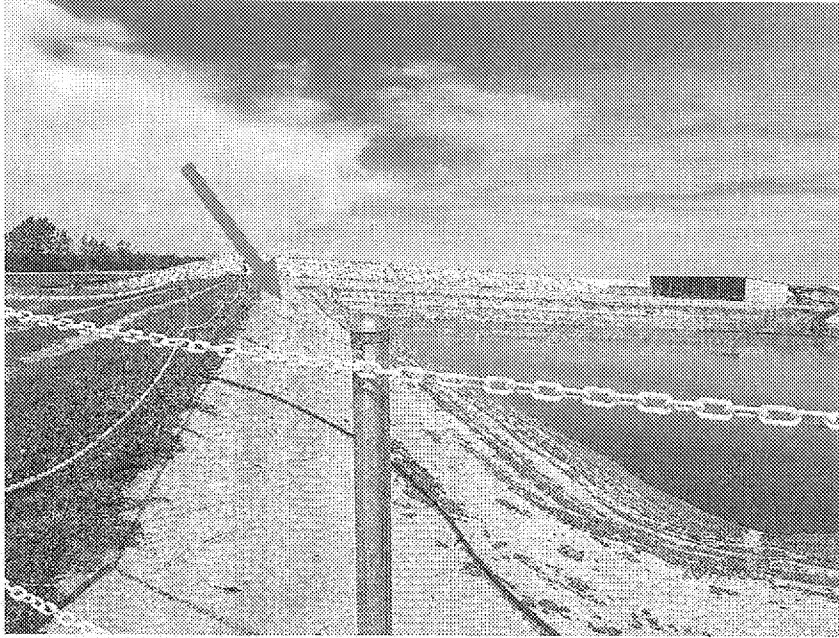
Description: Manure storage lagoon.

Location: Southeast corner of the manure storage lagoon

Camera Direction: Northwest

Date: 6/21/2017





5: P6210158

Description: Arrow is pointing to the Maximum Operating Level (MOL) marker on the south bank of the manure storage lagoon.

Location: Southeast corner of the manure storage lagoon

Camera Direction: South

Date: 6/21/2017



6: P6210159

Description: The red arrow shows the MOL marker on the south bank of of the manure storage lagoon.

Location: Southeast corner of the manure storage lagoon

Camera Direction: South

Date: 6/21/2017



7: P6210160

Description: Looking east of the manure storage lagoon the red arrow points to where there is a drainage pipe under the dirt road for the manure storage lagoon that allows storm water to flow into the vegetated depression area on the south side the manure storage lagoon.

Location: Southeast corner of the manure storage lagoon

Camera Direction: Southeast

Date: 6/21/2017



8: P6210161

Description: Wells CSD-1S and CSD-1D are located among the trees.

Location: Southeast corner of the manure storage lagoon

Camera Direction: East

Date: 6/21/2017



9: P6210162

Description: Wells CSD-1S and CSD-1D.

Location: Approximately 200 feet east of the southeast corner of the manure storage lagoon

Camera Direction: East

Date: 6/21/2017



10: P6210163

Description: Well CSD-1S.

Location: Approximately 200 feet east of the southeast corner of the manure storage lagoon

Camera Direction: Down

Date: 6/21/2017



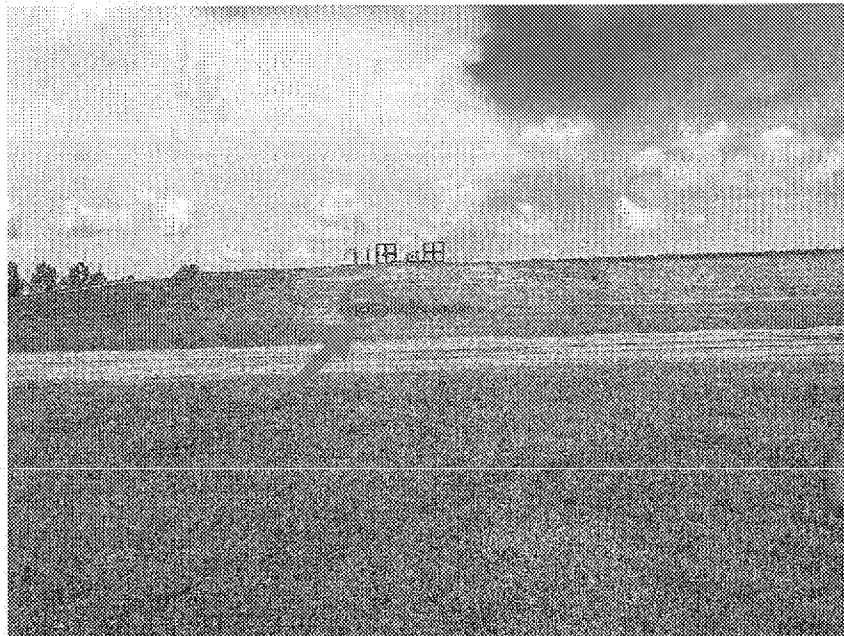
11: P6210164

Description: Well CSD-1D.

Location: Approximately 200 feet east of the southeast corner of the manure storage lagoon

Camera Direction: Down

Date: 6/21/2017



12: P6210165

Description: There is a manhole and pumping equipment on the east outer bank of the manure storage lagoon from which manure is pumped.

Location: Approximately 150 feet east of the manure storage lagoon

Camera Direction: West

Date: 6/21/2017





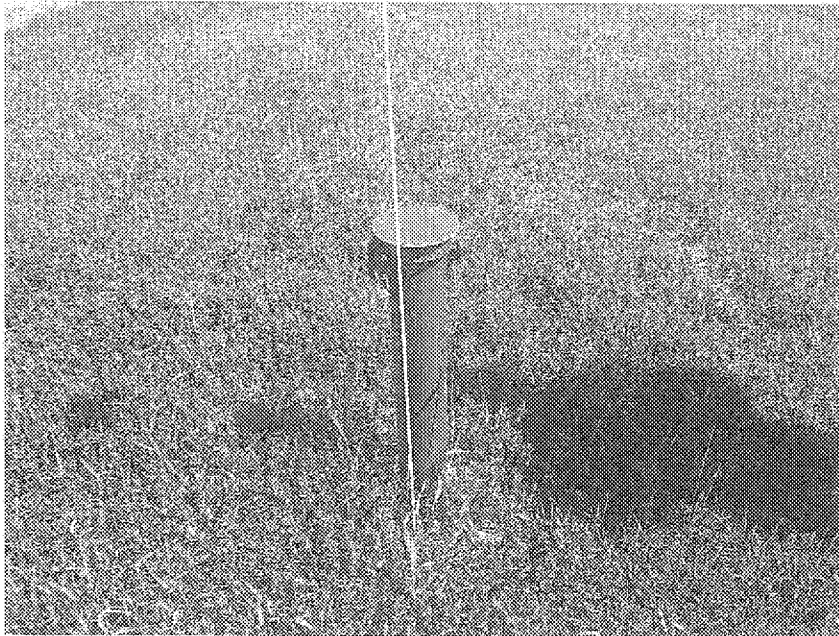
13: P6210166

Description: Crop fields north and east of Central Sands Dairy, LLC.

Location: Approximately 150 feet east of the manure storage lagoon

Camera Direction: Northeast

Date: 6/21/2017



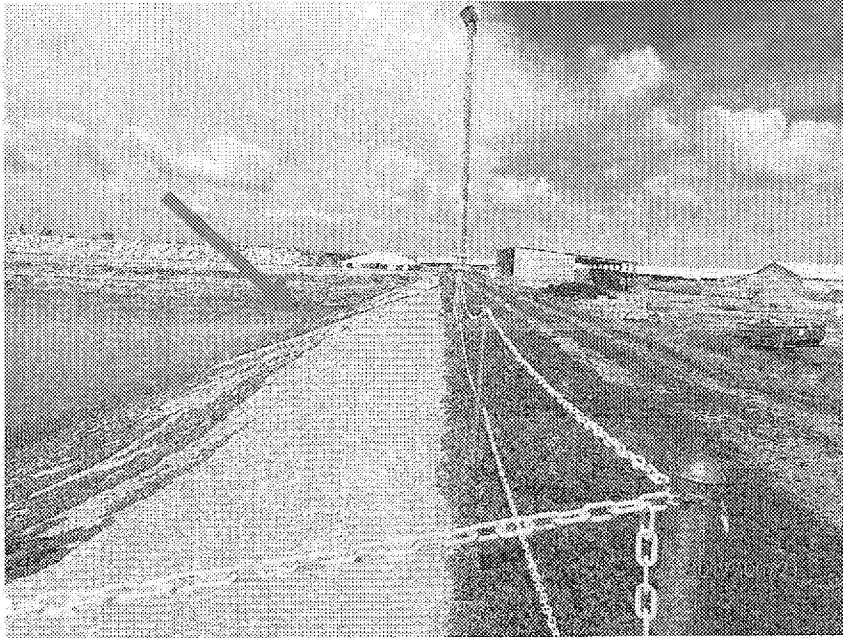
14: P6210167

Description: Well CSD-9.

Location: Approximately 150 feet east of the manure storage lagoon

Camera Direction: Down

Date: 6/21/2017



15: P6210168

Description: Looking at the north bank of the manure storage lagoon. Red arrow depicts the location of a hose going into the manure storage lagoon.

Location: Northeast corner of the manure storage lagoon

Camera Direction: West

Date: 6/21/2017



16: P6210169

Description: Looking west at bagged silage and commodity building.

Location: Northeast corner of the manure storage lagoon

Camera Direction: West

Date: 6/21/2017



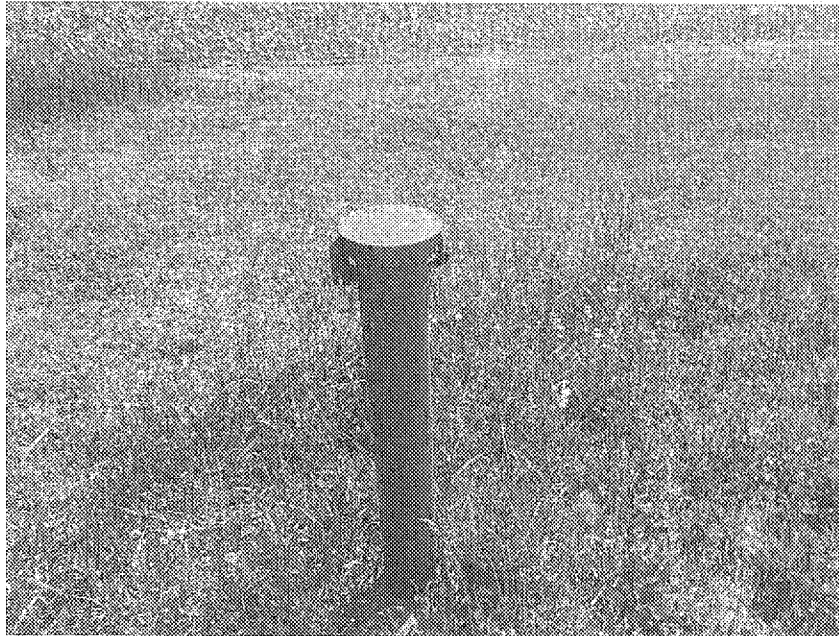
17: P6210170

Description: Bagged silage located on north side of the manure storage lagoon.

Location: Northwest corner of the manure storage lagoon

Camera Direction: North

Date: 6/21/2017



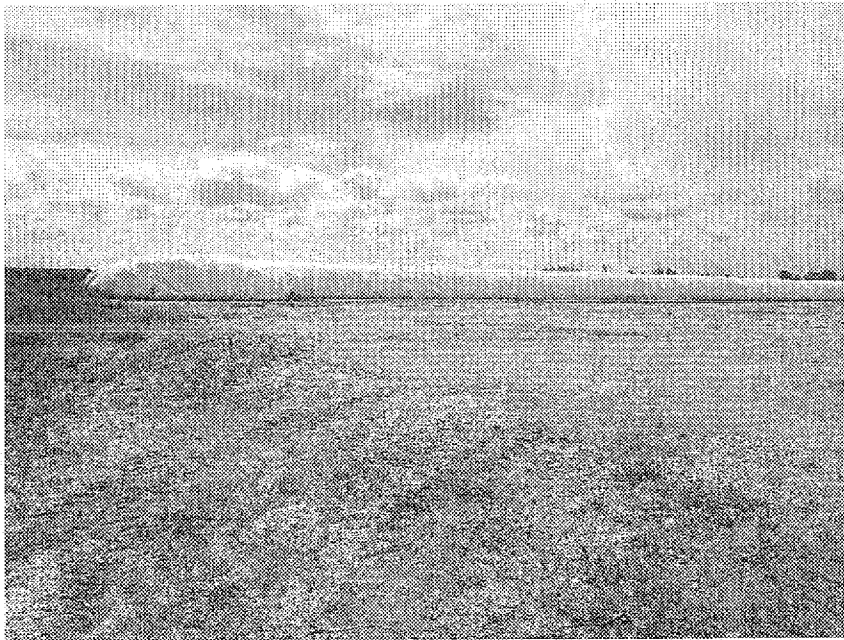
18: P6210171

Description: Well CSD-6.

Location: Approximately 100ft from the northeast corner of the manure storage lagoon

Camera Direction: North

Date: 6/21/2017



19: P6210172

Description: Empty area between the bagged silage north of the manure storage lagoon.

Location: Approximately 500ft from the north bank of the manure storage lagoon

Camera Direction: Southeast

Date: 6/21/2017



20: P6210173

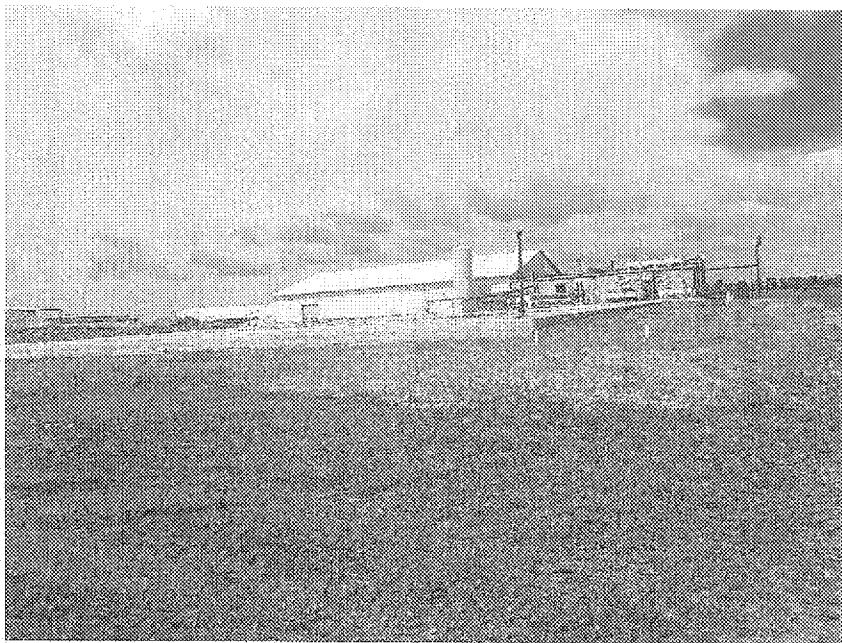
Description: Empty area between the bagged silage north of the manure storage lagoon.

Location: Approximately 500ft from the north bank of the manure storage lagoon

Camera Direction: South

Date: 6/21/2017





21: P6210174

Description: Digester west of the bagged silage.

Location: Digester

Camera Direction: West

Date: 6/21/2017



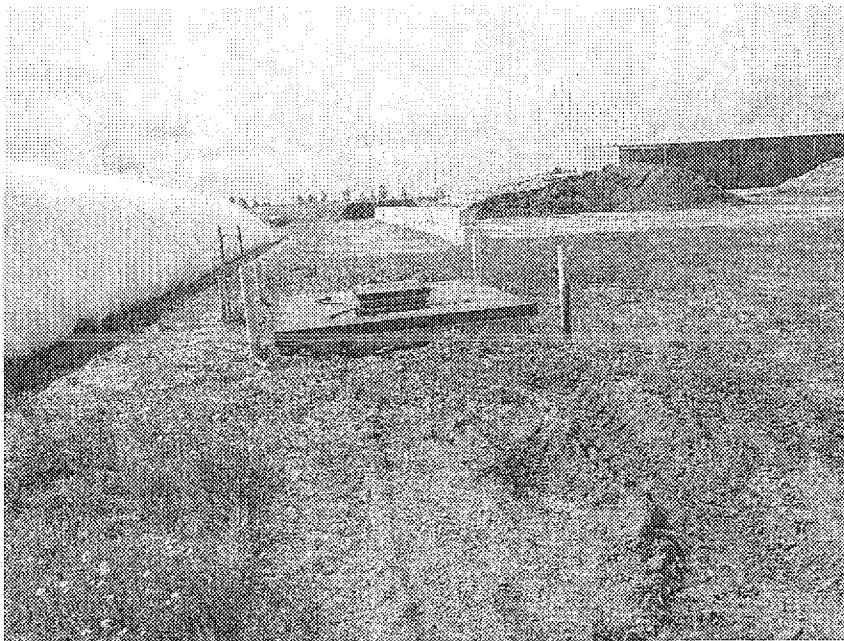
22: P6210175

Description: Digester west of the bagged silage.

Location: Digester

Camera Direction: West

Date: 6/21/2017



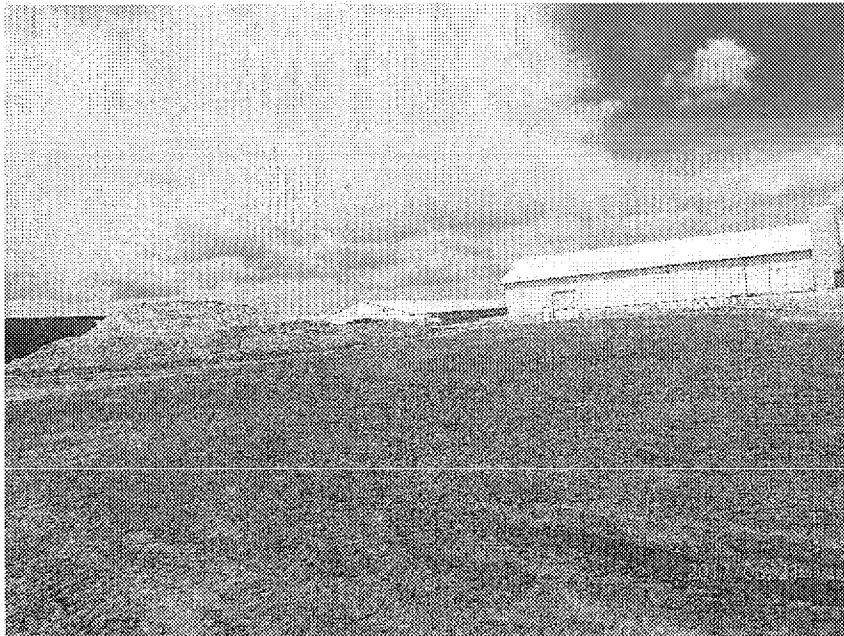
23: P6210176

Description: Access point to the clean water pipes that go into the digester.

Location: Southeast corner of the digester

Camera Direction: South

Date: 6/21/2017



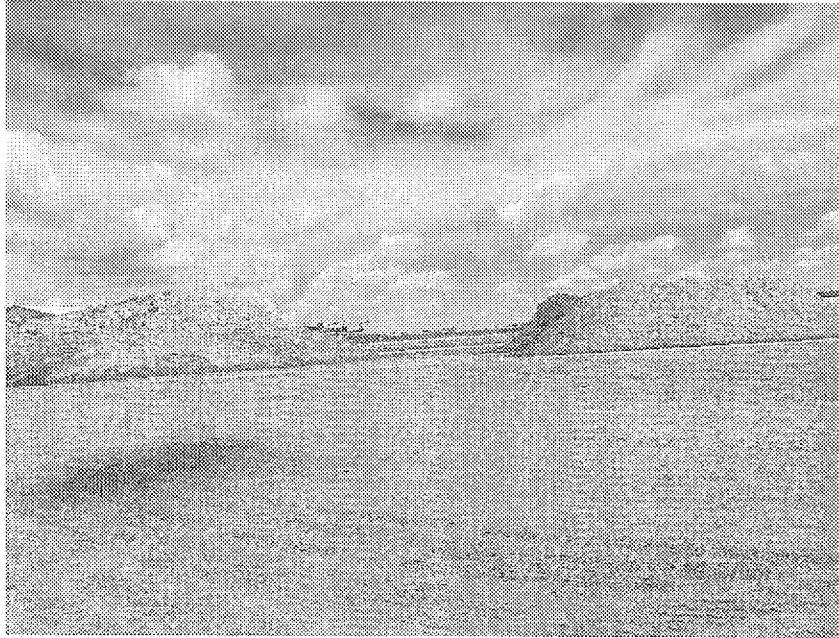
24: P6210177

Description: Area south of the digester. It slopes north towards the digester.

Location: Southeast of the digester

Camera Direction: Southwest

Date: 6/21/2017



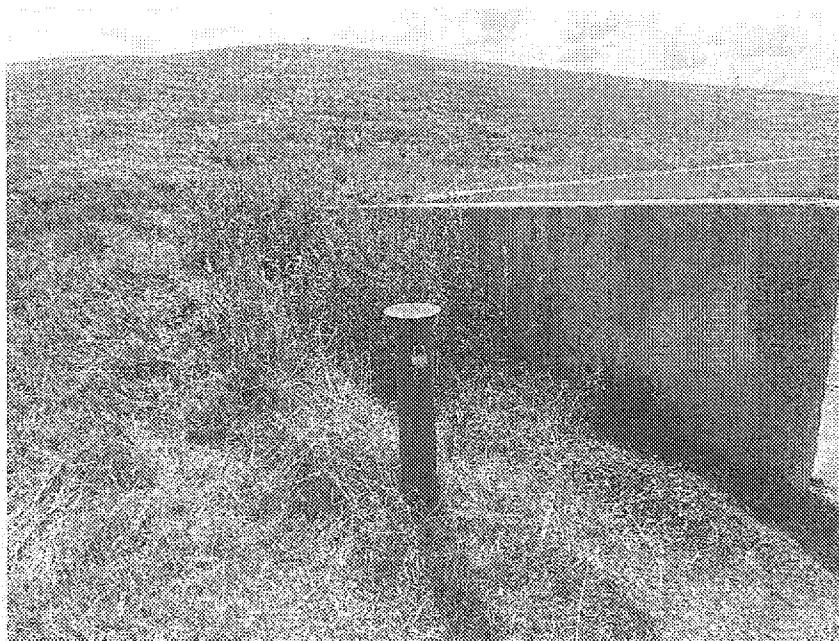
25: P6210178

Description: Sand storage area.

Location: South of the digester

Camera Direction: North

Date: 6/21/2017



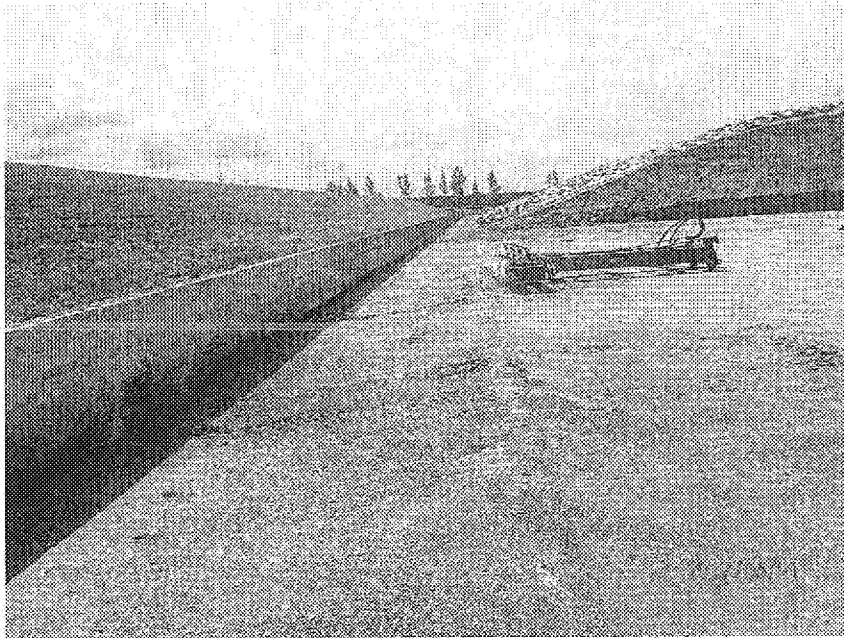
26: P6210179

Description: Well CSD-7.

Location: Northwest corner of the manure storage lagoon

Camera Direction: South

Date: 6/21/2017



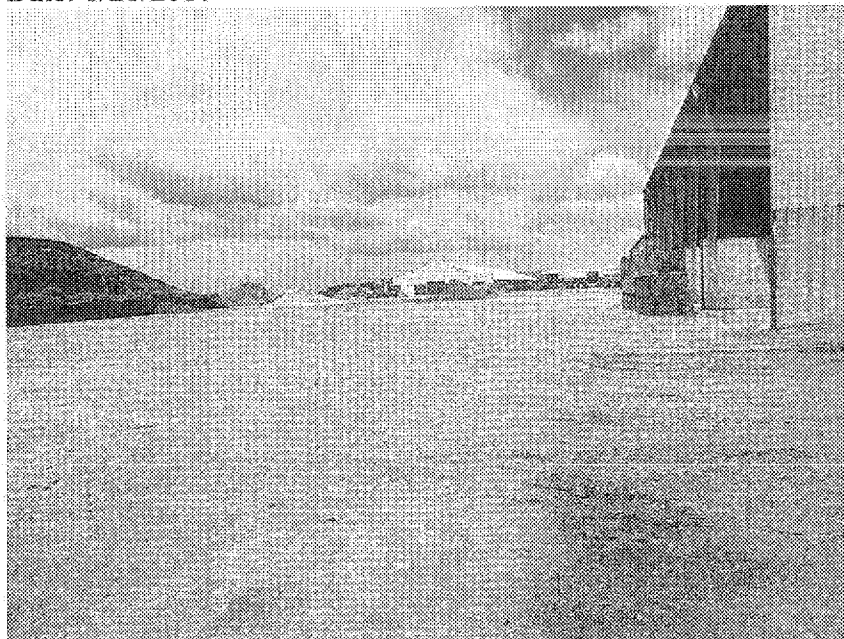
27: P6210180

Description: Silage bunker.

Location: West of the manure storage lagoon

Camera Direction: South

Date: 6/21/2017



28: P6210181

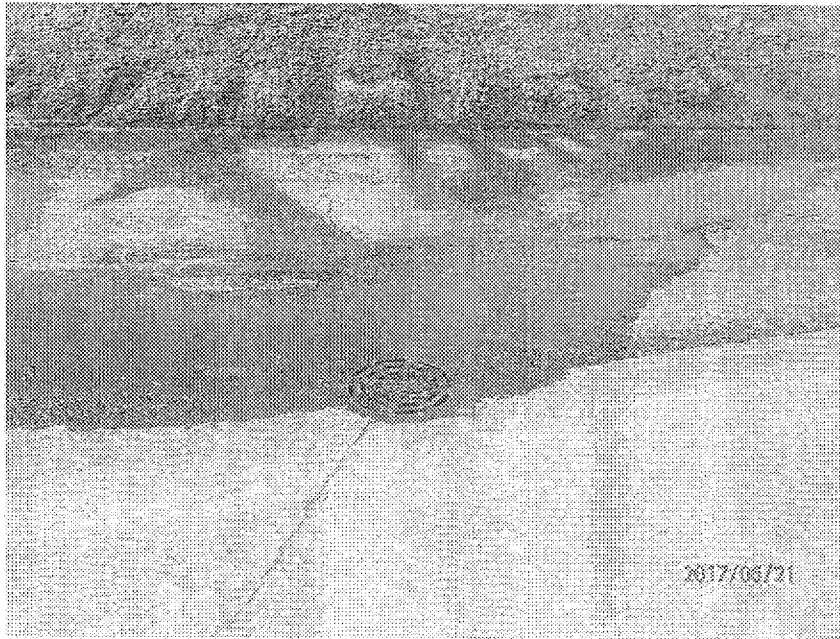
Description: Silage bunker.

Location: West of the manure storage lagoon

Camera Direction: West

Date: 6/21/2017





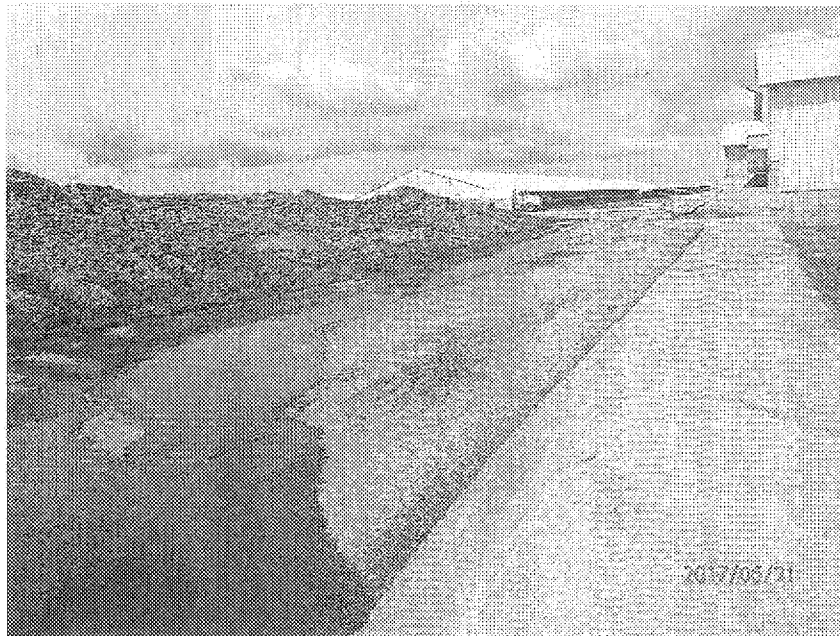
29: P6210182

Description: Manhole next to the sand storage area.

Location: South of the digester

Camera Direction: Down

Date: 6/21/2017



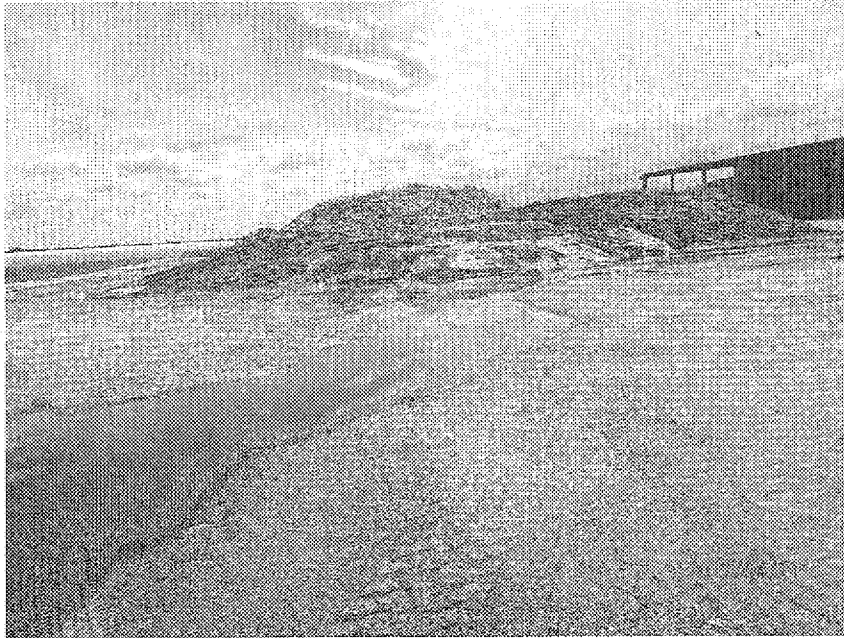
30: P6210183

Description: Area draining to the manhole in photo 29 above.

Location: South of the digester

Camera Direction: West

Date: 6/21/2017



31: P6210184

Description: Sand storage area in front of the sand separator building. Process wastewater flows east.

Location: Sand storage area south of the sand separator building

Camera Direction: East

Date: 6/21/2017



32: P6210185

Description: Sand separator building.

Location: Sand separator building

Camera Direction: North

Date: 6/21/2017



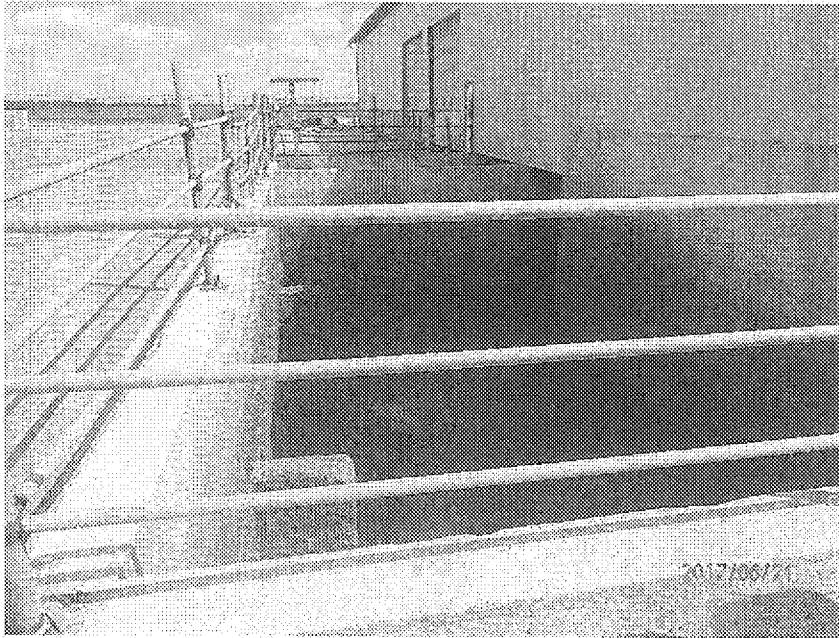
33: P6210186

Description: Sand storage area in front of the sand separator building. Process water flows east.

Location: Sand storage area south of the sand separator building

Camera Direction: East

Date: 6/21/2017



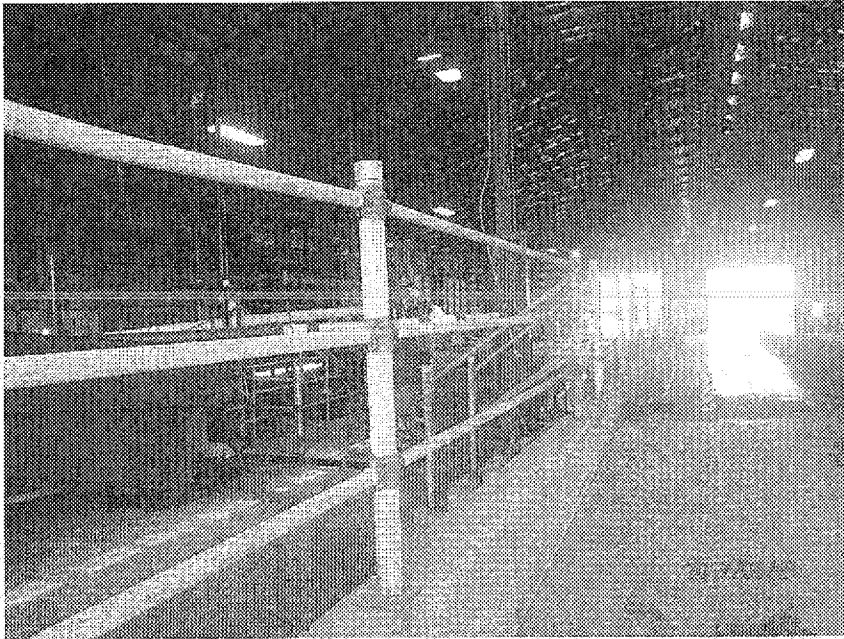
34: P6210187

Description: Digester for the sand mix next to the sand separator building. It receives process wastewater water from the cleaning of the milking parlor.

Location: Sand separator building

Camera Direction: North

Date: 6/21/2017



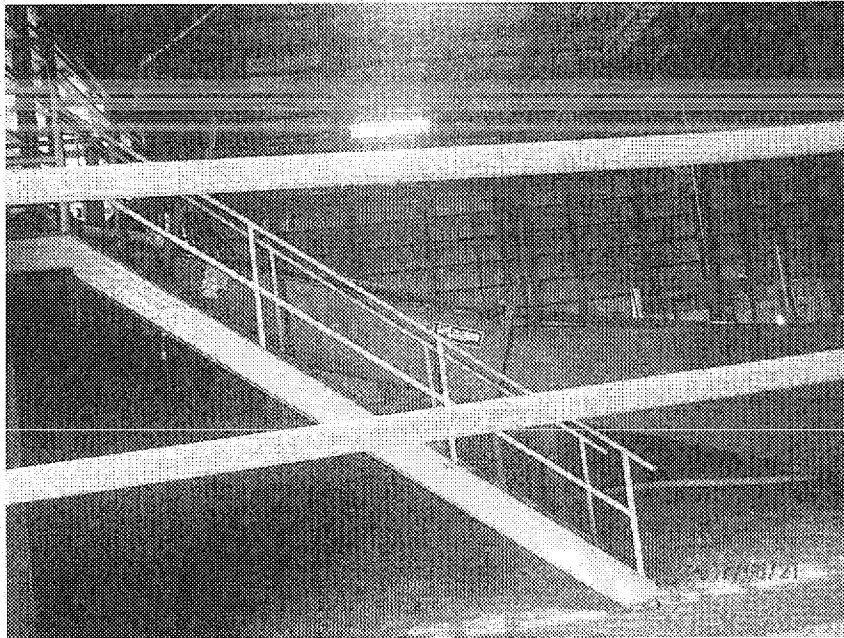
35: P6210188

Description: Inside the sand separator building.

Location: Inside the sand separator building

Camera Direction: North

Date: 6/21/2017



36: P6210189

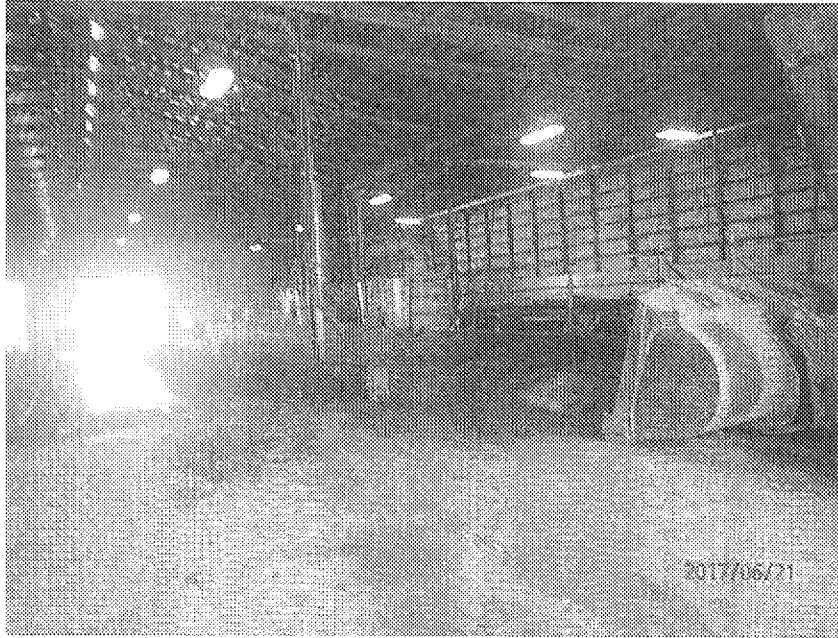
Description: Inside the sand separator building.

Location: Inside the sand separator building

Camera Direction: West

Date: 6/21/2017





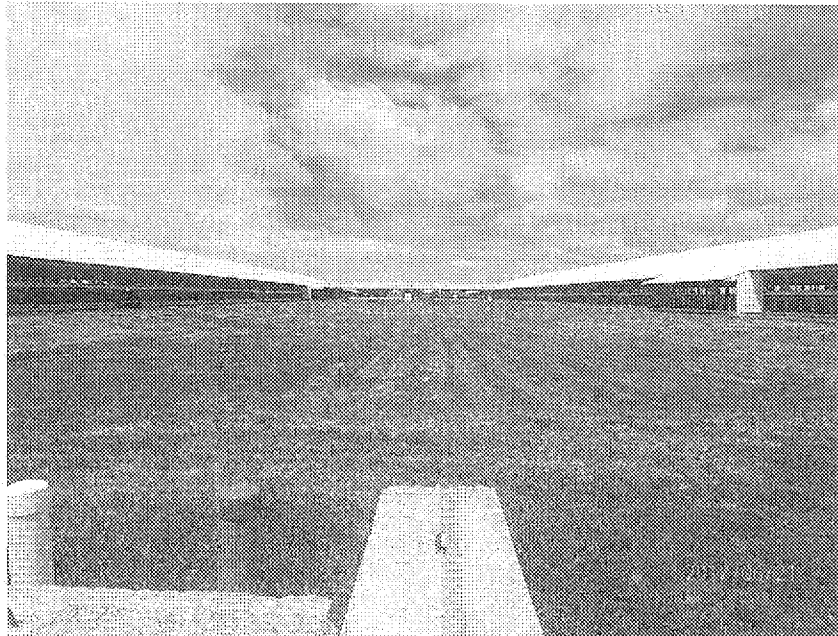
37: P6210190

Description: Inside the sand separator building.

Location: Inside the sand separator building

Camera Direction: North

Date: 6/21/2017



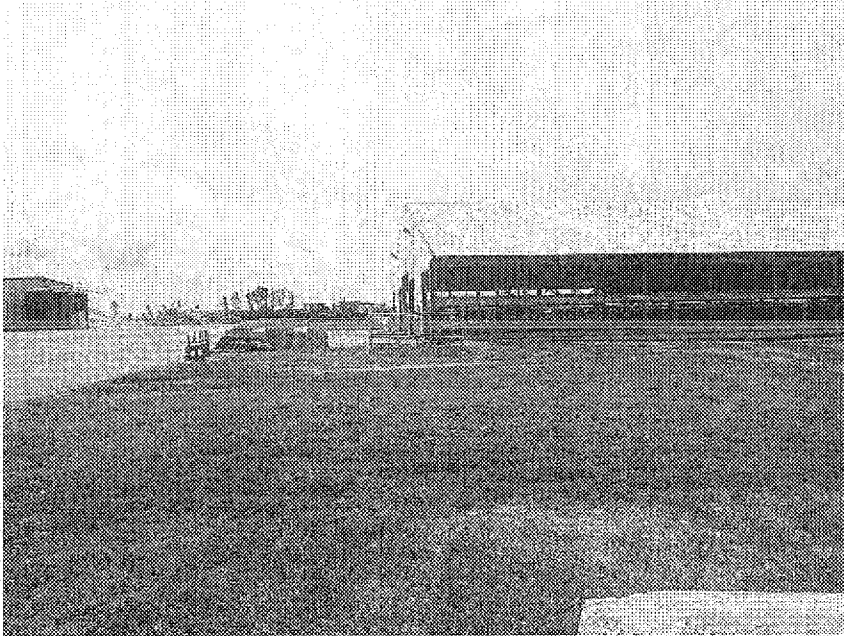
38: P6210191

Description: Grassed area between the south and north barns.

Location: East end of the south and north barns

Camera Direction: West

Date: 6/21/2017



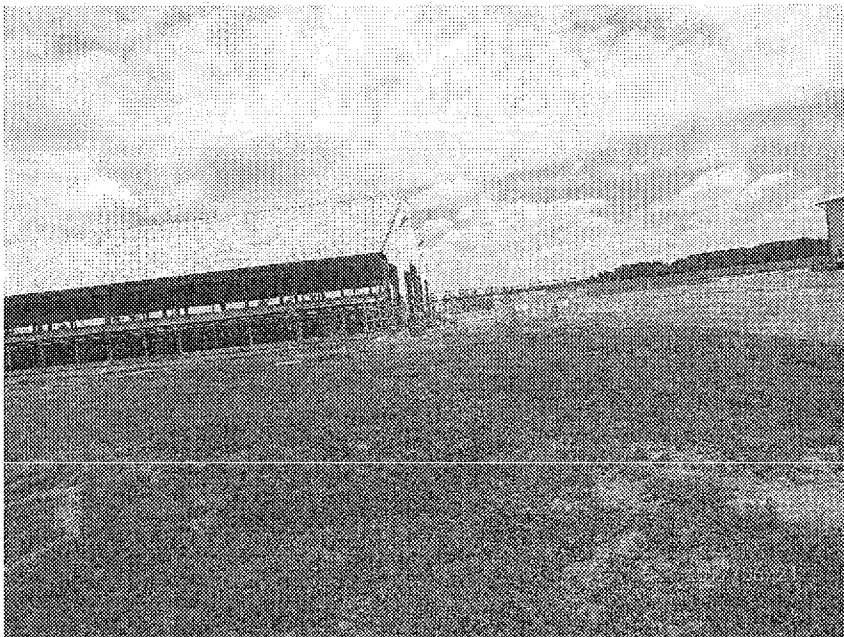
39: P6210192

Description: East end of the south barn.

Location: East end of north barn

Camera Direction: South

Date: 6/21/2017



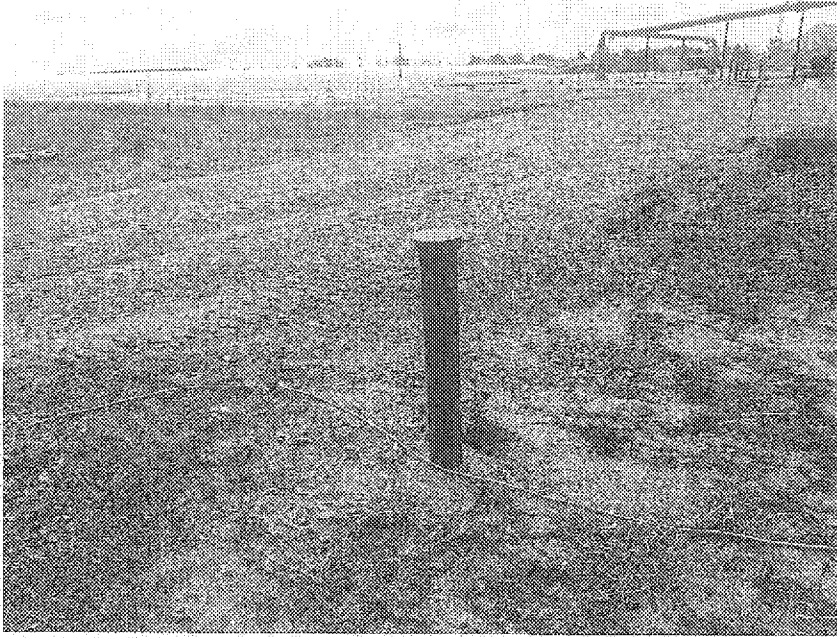
40: P6210193

Description: East end of the north barn.

Location: East end of the south barn

Camera Direction: North

Date: 6/21/2017



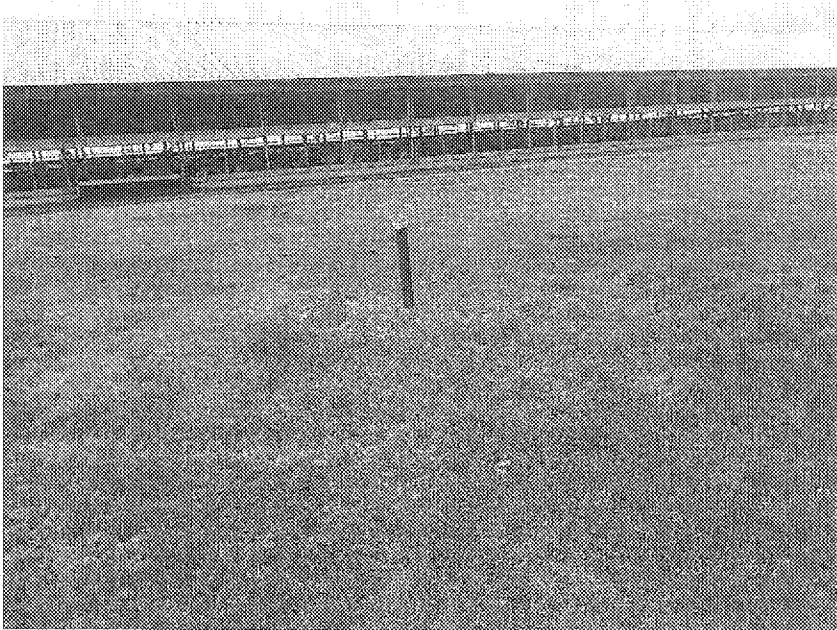
41: P6210194

Description: Well CSD-8.

Location: Northwest corner of the digester

Camera Direction: Southeast

Date: 6/21/2017



42: P6210195

Description: Well CSD-4.

Location: North of the north barn

Camera Direction: South

Date: 6/21/2017



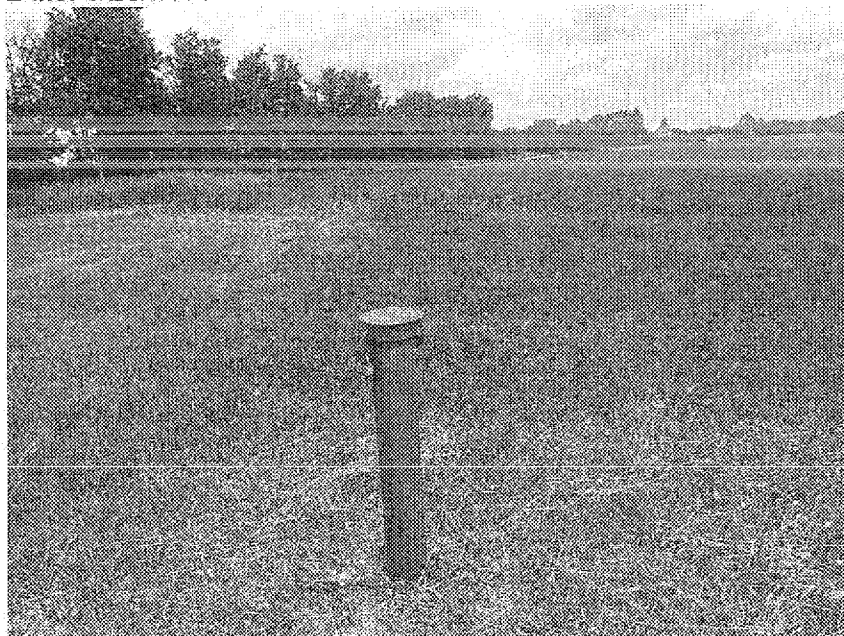
43: P6210196

Description: Well CSD-3S.

Location: Northwest corner of the north barn

Camera Direction: North

Date: 6/21/2017



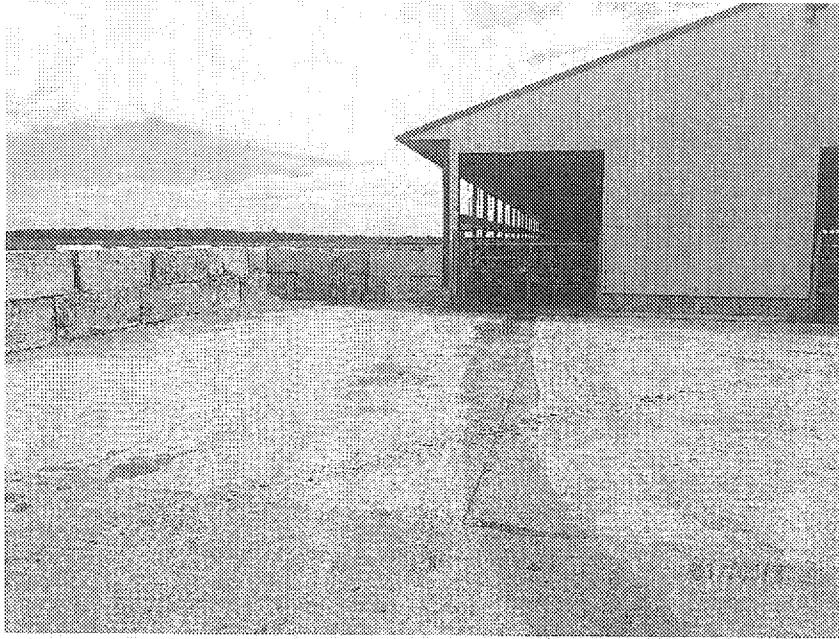
44: P6210197

Description: Well CSD-3D.

Location: Northwest corner of the north barn

Camera Direction: North

Date: 6/21/2017



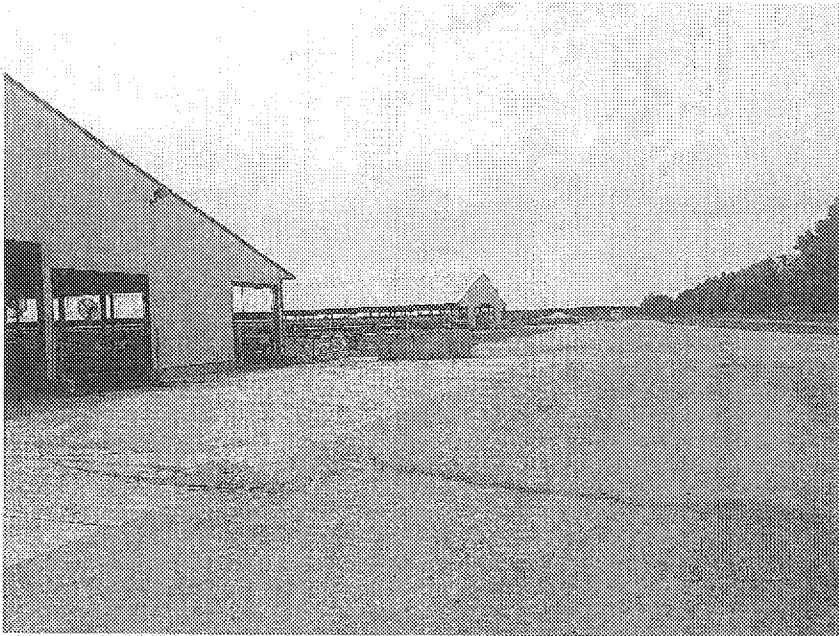
45: P6210198

Description: The west side of the north barn.

Location: The west side of the north barn

Camera Direction: East

Date: 6/21/2017



46: P6210199

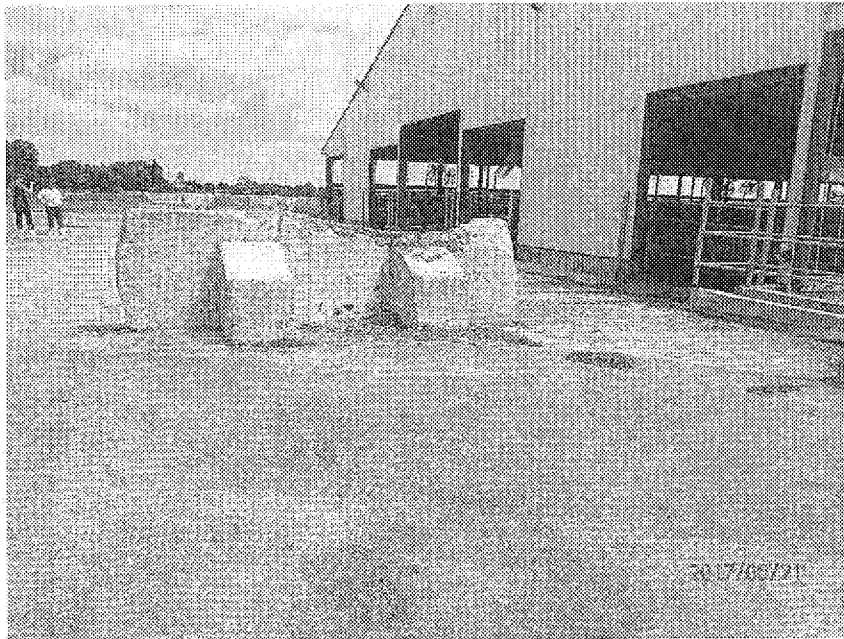
Description: Area west of the north and south barns.

Location: The west side of the north barn

Camera Direction: South

Date: 6/21/2017





47: P6210200

Description: West end of the north barn.

Location: The west side of the north barn

Camera Direction: North

Date: 6/21/2017



48: P6210201

Description: Pit outside of the north barn.

Location: The west side of the north barn

Camera Direction: Down

Date: 6/21/2017